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(54) METHOD FOR PRODUCING SAPONIN COMPOUNDS OBTAINED FROM UNDIFFERENTIATED CULTURE CELL OF MEDICINAL GINSENG

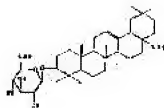
(57)Abstract:

PURPOSE: To obtain the short chain saponin expected to have a new pharmacological effect different from those of conventional saponins by a specific tissue-culture method from a medicinal ginseng plant body.

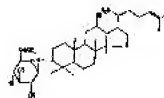
CONSTITUTION: A callus induced from a medicinal ginseng plant body is held in a dedifferentiation state for a constant period or longer, cultured in a

dedifferentiation state, and subjected to the removal of dedifferentiated cell lumps to obtain the saponin exhibiting a high multiplication property, establishing the homogenous culture cell systems of dedifferentiated cell lumps, and producing the dedifferentiated culture cells. Namely, the tissue of the medicinal ginseng plant body is subcultured in a culture medium for inducing the callus, and the obtained calluses are again subcultured in a culture medium for inducing the dedifferentiation. The dedifferentiated cell lumps are removed, and the

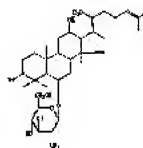
obtained undifferentiated cell lumps are cultured and subsequently subjected to the extraction of ingredients to obtain the saponins. The medicinal ginseng plant body is suitably *Panax japonicus*. Saponins of formulas I (R1 is H, 1-hexose), II (R2 is the same as R1), and III are obtained. The saponins can stably be supplied by the method.



I



II



III